

AECOM 100 North Broadway 20th Floor St. Louis MO, 63102 USA aecom.com

October 10, 2022

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Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section, Mail Code #19 1021 North Grand Avenue East Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency DWPC Marion Region 2309 West Main Street Marion, Illinois 62959

Discharge Monitoring Report for September 2022 (Permit No. 2020-EP-65299) Pump and Treat System Crab Orchard National Wildlife Refuge, Marion, Illinois

Dear Sir or Madam:

AECOM, on behalf of the United States Fish and Wildlife Service (USFWS), is submitting the attached September 2022 Discharge Monitoring Report (DMR) for the subject treatment system located on the Crab Orchard National Wildlife Refuge (CONWR) in Marion, Illinois. This DMR has been prepared as required by the Permit to Construct, Own, and Operate (Permit No. 2020-EP-65299), dated July 10, 2020, for discharge to the City of Marion, IL publicly owned treatment works (POTW). Discharge of the treated effluent of the Pump and Treat System to the Marion POTW commenced on May 4, 2011. Within the month of September 2022, the system experienced a technical issue and flow data was lost for September 23rd – September 25th. Aside from this issue, the system operated nominally for the duration of the month. The enclosed discharge summary was used to prepare the DMR.

Please contact Mr. Brooks Pfeiffer (314.429.0100) with any questions.

Sincerely,

Brooks Pfeiffer Senior Technician

Budis C Shifts

AECOM

encl: DMR

Discharge Summary

cc: (via electronic mail) Viral Patel, USEPA

Paul Lake, IEPA

Leanne Moore, USFWS Project Coordinator

Chuck Beasley, USFWS Tim Rodeffer, USFWS

Brent Cain, City of Marion POTW

USFWS

Crab Orchard National Wildlife

NAME Refuge **ADDRESS**

LOCATION

8588 Route 148 Marion, IL 62599

FACILITY Crab Orchard National Wildlife

Refuge Superfund Site

e	2020-EP-65299
	PERMIT NUMBER

DISCHARGE MONITORING REPORT (DMR)					
	to POTW				
ł	DISCHARGE NUMBER				

MONITORING PERIOD YEAR MO DAY YEAR МО DAY 09 01 09 30 2022 2022 FROM то

NOTE: Read instructions before

		QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO.	FREQUENCY	SAMPLE	
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNI	UNITS	OF ANALYSIS	TYPE
Flow, Total Daily Volume	SAMPLE	5,336	7,609	gpd					0	Daily	Cont
	PERMIT REQUIREMENT	7,200	14,400							Daily	Cont
Flow, Daily Average Rate	SAMPLE	3.67	4.29	gpm					0	Daily	Cont
	PERMIT REQUIREMENT	Report	Report							Daily	Cont
pH, Standard Units	SAMPLE				7.27		7.27	s.u.	0	1/mo	Grab
	PERMIT REQUIREMENT				5.5		9.5			1/mo	Grab
Polychlorinated Biphenyls, total	SAMPLE				< 0.00044	< 0.00044	< 0.00044	mg/L	. 0	1/mo	Grab
	PERMIT REQUIREMENT						0.003			1/mo	Grab
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										
supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate					TELEPH	ONE	DATE	I .			
Brooks C. Pfeiffer and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false				GNATURE OF PRINCIPAL EXE		314 42	29.0100	2022 10	10		

TYPED OR PRINTED

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

	TELEPHONE	DATE			
314	429.0100	2022	10	10	
AREA	AREA NUMBER		МО	DAY	

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Operated under the supervision of Brooks Pfeiffer, Class K Operator - Crab Orchard Pump and Treat System

				Effluent		
September	Flow	Totalizer	Total Flow	Total PCBs	pН	
2022	(gpm)	(gal)	(gpd)	(mg/L)	(s.u.)	Comments
9/1/2022	3.41	18,766,593	4,936			
9/2/2022	3.40	18,771,529	4,903			
9/3/2022	3.39	18,776,432	4,875			
9/4/2022	3.39	18,781,307	4,873			
9/5/2022	3.40	18,786,180	4,929			
9/6/2022	3.37	18,791,109	4,861			
9/7/2022	3.17	18,795,970	4,565			
9/8/2022	3.23	18,800,535	4,665			
9/9/2022	3.20	18,805,200	4,613			
9/10/2022	3.18	18,809,813	4,557			
9/11/2022	3.15	18,814,370	4,539			
9/12/2022	3.18	18,818,909	4,557			
9/13/2022	3.13	18,823,466	4,517			
9/14/2022	3.97	18,827,983	5,720	< 0.00044	7.27	
9/15/2022	4.22	18,833,703	6,064			
9/16/2022	4.16	18,839,767	6,003			
9/17/2022	4.10	18,845,770	5,889			
9/18/2022	4.00	18,851,659	5,757			
9/19/2022	3.89	18,857,416	5,601			
9/20/2022	3.83	18,863,017	5,512			
9/21/2022	3.76	18,868,529	5,404			
9/22/2022	3.77	18,873,933	5,433			
9/23/2022						missing data due to technical issue
9/24/2022						missing data due to technical issue
9/25/2022						missing data due to technical issue
9/26/2022	4.29	18,887,120	6,161			
9/27/2022	3.87	18,893,281	5,579			
9/28/2022	4.03	18,898,860	5,813			
9/29/2022	4.27	18,904,673	6,147			
9/30/2022	4.22	18,910,820	7,609			
				Efflue	nt	
Data	Flow	Totalizer	Total Flow	Total PCBs	pН	
Summary	(gpm)	(gal)	(gpd)	(mg/L)	(s.u.)	Comments
Minimum	3.13	18,766,593	4,517	< 0.00044	7.27	
Average	3.67	18,833,257	5,336	< 0.00044	7.27	
Maximum	4.29	18,910,820	7,609	< 0.00044	7.27	

Notes:

gpm - gallons per minute gal - gallons gpd - gallons per day

s.u. - standard units

gpd - gallons per day
PCBs - polychlorinated biphenyls
mg/L - milligrams per liter
< - analyte not detected